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RAW SEQUENCE LISTING

DATE: 11/06/2001

PATENT APPLICATION: US/09/904,099

TIME: 11:58:40

Input Set : A:\10602-013-999.txt

Output Set: N:\CRF3\11062001\I904099.raw

3 <110> APPLICANT: Shankar, Geetha
5 Munning, Jason N
7 Spencer, Juliet V
9 <120> TITLE OF INVENTION: CHIMERIC G PROTEIN COUPLED RECEPTORS
11 <130> FILE REFERENCE: 10602-013-999
13 <140> CURRENT APPLICATION NUMBER: 09/904,099
15 <141> CURRENT FILING DATE: 2001-07-11
17 <160> NUMBER OF SEQ ID NOS: 38
19 <170> SOFTWARE: PatentIn version 3.1
21 <210> SEQ ID NO: 1
23 <211> LENGTH: 382
25 <212> TYPE: PRT
27 <213> ORGANISM: Homo sapiens
29 <400> SEQUENCE: 1
31 Met Gly Pro Thr Ser Val Pro Leu Val Lys Ala His Arg Ser Ser Val
32 1 5 10 15
33 Ser Asp Tyr Val Asn Tyr Asp Ile Ile Val Arg His Tyr Asn Tyr Thr
34 20 25 30
35 Gly Lys Leu Asn Ile Ser Ala Asp Lys Glu Asn Ser Ile Lys Leu Thr
36 35 40 45
37 Ser Val Val Phe Ile Leu Ile Cys Cys Phe Ile Ile Leu Glu Asn Ile
38 50 55 60
39 Phe Val Leu Leu Thr Ile Trp Lys Thr Lys Lys Phe His Arg Pro Met
40 65 70 75 80
41 Tyr Tyr Phe Ile Gly Asn Leu Ala Leu Ser Asp Leu Leu Ala Gly Val
42 85 90 95
43 Ala Tyr Thr Ala Asn Leu Leu Leu Ser Gly Ala Thr Thr Tyr Lys Leu
44 100 105 110
45 Thr Pro Ala Gln Trp Phe Leu Arg Glu Gly Ser Met Phe Val Ala Leu
46 115 120 125
47 Ser Ala Ser Val Phe Ser Leu Leu Ala Ile Ala Ile Glu Arg Tyr Ile
48 130 135 140
49 Thr Met Leu Lys Met Lys Leu His Asn Gly Ser Asn Asn Phe Arg Leu
50 145 150 155 160
51 Phe Leu Leu Ile Ser Ala Cys Trp Val Ile Ser Leu Ile Leu Gly Gly
52 165 170 175
53 Leu Pro Ile Met Gly Trp Asn Cys Ile Ser Ala Leu Ser Ser Cys Ser
54 180 185 190
55 Thr Val Leu Pro Leu Tyr His Lys His Tyr Ile Leu Phe Cys Thr Thr
56 195 200 205
57 Val Phe Thr Leu Leu Leu Leu Ser Ile Val Ile Leu Tyr Cys Arg Ile
58 210 215 220
59 Tyr Ser Leu Val Arg Thr Arg Ser Arg Arg Leu Thr Phe Arg Lys Asn
60 225 230 235 240
61 Ile Ser Lys Ala Ser Arg Ser Ser Glu Lys Ser Leu Ala Leu Leu Lys
62 245 250 255
63 Thr Val Ile Ile Val Leu Ser Val Phe Ile Ala Cys Trp Ala Pro Leu

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p.5

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DATE: 11/06/2001

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Input Set : A:\10602-013-999.txt

Output Set: N:\CRF3\11062001\I904099.raw

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64          260          265          270
66 Phe Ile Leu Leu Leu Asp Val Gly Cys Lys Val Lys Thr Cys Asp
67          275          280          285
68 Ile Leu Phe Arg Ala Glu Tyr Phe Leu Val Leu Ala Val Leu Asn Ser
69          290          295          300
70 Gly Thr Asn Pro Ile Ile Tyr Thr Leu Thr Asn Lys Glu Met Arg Arg
71 305          310          315          320
72 Ala Phe Ile Arg Ile Met Ser Cys Cys Lys Cys Pro Ser Gly Asp Ser
73          325          330          335
74 Ala Gly Lys Phe Lys Arg Pro Ile Ile Ala Gly Met Glu Phe Ser Arg
75          340          345          350
76 Ser Lys Ser Asp Asn Ser Ser His Pro Gln Lys Asp Glu Gly Asp Asn
77          355          360          365
78 Pro Glu Thr Ile Met Ser Ser Gly Asn Val Asn Ser Ser Ser
79          370          375          380
81 <210> SEQ ID NO: 2
83 <211> LENGTH: 378
85 <212> TYPE: PRT
87 <213> ORGANISM: Homo sapiens
89 <400> SEQUENCE: 2
91 Met Ala Thr Ala Leu Pro Pro Arg Leu Gln Pro Val Arg Gly Asn Glu
92 1          5          10          15
93 Thr Leu Arg Glu His Tyr Gln Tyr Val Gly Lys Leu Ala Gly Arg Leu
94          20          25          30
95 Lys Glu Ala Ser Glu Gly Ser Thr Leu Thr Thr Val Leu Phe Leu Val
96          35          40          45
97 Ile Cys Ser Phe Ile Val Leu Glu Asn Leu Met Val Leu Ile Ala Ile
98          50          55          60
99 Trp Lys Asn Asn Lys Phe His Asn Arg Met Tyr Phe Phe Ile Gly Asn
100 65          70          75          80
101 Leu Ala Leu Cys Asp Leu Leu Ala Gly Ile Ala Tyr Lys Val Asn Ile
102          85          90          95
103 Leu Met Ser Gly Lys Lys Thr Phe Ser Leu Ser Pro Thr Val Trp Phe
104          100          105          110
105 Leu Arg Glu Gly Ser Met Phe Val Ala Leu Gly Ala Ser Thr Cys Ser
106          115          120          125
107 Leu Leu Ala Ile Ala Ile Glu Arg His Leu Thr Met Ile Lys Met Arg
108          130          135          140
109 Pro Tyr Asp Ala Asn Lys Arg His Arg Val Phe Leu Leu Ile Gly Met
110 145          150          155          160
111 Cys Trp Leu Ile Ala Phe Thr Leu Gly Ala Leu Pro Ile Leu Gly Trp
112          165          170          175
113 Asn Cys Leu His Asn Leu Pro Asp Cys Ser Thr Ile Leu Pro Leu Tyr
114          180          185          190
115 Ser Lys Lys Tyr Ile Ala Phe Cys Ile Ser Ile Phe Thr Ala Ile Leu
116          195          200          205
117 Val Thr Ile Val Ile Leu Tyr Ala Arg Ile Tyr Phe Leu Val Lys Ser
118          210          215          220
119 Ser Ser Arg Lys Val Ala Asn His Asn Asn Ser Glu Arg Ser Met Ala

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TIME: 11:58:40

Input Set : A:\10602-013-999.txt

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```

120 225          230          235          240
122 Leu Leu Arg Thr Val Val Ile Val Val Ser Val Phe Ile Ala Cys Trp
123          245          250          255
124 Ser Pro Leu Phe Ile Leu Phe Leu Ile Asp Val Ala Cys Arg Val Gln
125          260          265          270
126 Ala Cys Pro Ile Leu Phe Lys Ala Gln Trp Phe Ile Val Leu Ala Val
127          275          280          285
128 Leu Asn Ser Ala Met Asn Pro Val Ile Tyr Thr Leu Ala Ser Lys Glu
129          290          295          300
131 Met Arg Arg Ala Phe Phe Arg Leu Val Cys Asn Cys Leu Val Arg Gly
132 305          310          315          320
133 Arg Gly Ala Arg Ala Ser Pro Ile Gln Pro Ala Leu Asp Pro Ser Arg
134          325          330          335
135 Ser Lys Ser Ser Ser Ser Asn Asn Ser Ser His Ser Pro Lys Val Lys
136          340          345          350
137 Glu Asp Leu Pro His Thr Asp Pro Ser Ser Cys Ile Met Asp Lys Asn
138          355          360          365
139 Ala Ala Leu Gln Asn Gly Ile Phe Cys Asn
140          370          375

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142 <210> SEQ ID NO: 3

144 <211> LENGTH: 391

146 <212> TYPE: PRT

C--> 148 <213> ORGANISM: Artificial

150 <220> FEATURE:

152 <223> OTHER INFORMATION: Description of artificial sequence: Chimeric Edg receptor

154 <400> SEQUENCE: 3

```

156 Met Gly Pro Thr Ser Val Pro Leu Val Lys Ala His Arg Ser Ser Val
157 1          5          10          15
158 Ser Asp Tyr Val Asn Tyr Asp Ile Ile Val Arg His Tyr Asn Tyr Thr
159          20          25          30
160 Gly Lys Leu Asn Ile Ser Ala Asp Lys Glu Asn Ser Ile Lys Leu Thr
161          35          40          45
162 Ser Val Val Phe Ile Leu Ile Cys Cys Phe Ile Ile Leu Glu Asn Ile
163          50          55          60
164 Phe Val Leu Leu Thr Ile Trp Lys Thr Lys Lys Phe His Arg Pro Met
165 65          70          75          80
166 Tyr Tyr Phe Ile Gly Asn Leu Ala Leu Ser Asp Leu Leu Ala Gly Val
167          85          90          95
168 Ala Tyr Thr Ala Asn Leu Leu Leu Ser Gly Ala Thr Thr Tyr Lys Leu
169          100          105          110
170 Thr Pro Ala Gln Trp Phe Leu Arg Glu Gly Ser Met Phe Val Ala Leu
171          115          120          125
172 Ser Ala Ser Val Phe Ser Leu Leu Ala Ile Ala Ile Glu Arg Tyr Ile
173          130          135          140
174 Thr Met Leu Lys Met Lys Leu His Asn Gly Ser Asn Asn Phe Arg Leu
175 145          150          155          160
176 Phe Leu Leu Ile Ser Ala Cys Trp Val Ile Ser Leu Ile Leu Gly Gly
177          165          170          175
178 Leu Pro Ile Met Gly Trp Asn Cys Ile Ser Ala Leu Ser Ser Cys Ser

```

RAW SEQUENCE LISTING

DATE: 11/06/2001

PATENT APPLICATION: US/09/904,099

TIME: 11:58:40

Input Set : A:\10602-013-999.txt

Output Set: N:\CRF3\11062001\I904099.raw

```

179          180          185          190
180 Thr Val Leu Pro Leu Tyr His Lys His Tyr Ile Leu Phe Cys Thr Thr
181          195          200          205
183 Val Phe Thr Leu Leu Leu Leu Ser Ile Val Ile Leu Tyr Cys Arg Ile
184          210          215          220
185 Tyr Ser Leu Val Arg Thr Arg Ser Arg Arg Leu Thr Phe Arg Lys Asn
186 225          230          235          240
187 Ile Ser Lys Ala Ser Arg Ser Ser Glu Lys Ser Leu Ala Leu Leu Lys
188          245          250          255
189 Thr Val Ile Ile Val Leu Ser Val Phe Ile Ala Cys Trp Ala Pro Leu
190          260          265          270
191 Phe Ile Leu Leu Leu Leu Asp Val Gly Cys Lys Val Lys Thr Cys Asp
192          275          280          285
193 Ile Leu Phe Arg Ala Glu Tyr Phe Leu Val Leu Ala Val Leu Asn Ser
194          290          295          300
196 Gly Thr Asn Pro Ile Ile Tyr Thr Leu Thr Ser Lys Glu Met Arg Arg
197 305          310          315          320
198 Ala Phe Phe Arg Leu Val Cys Asn Cys Leu Val Arg Gly Arg Gly Ala
199          325          330          335
200 Arg Ala Ser Pro Ile Gln Pro Ala Leu Asp Pro Ser Arg Ser Lys Ser
201          340          345          350
202 Ser Ser Ser Asn Asn Ser Ser His Ser Pro Lys Val Lys Glu Asp Leu
203          355          360          365
204 Pro His Thr Asp Pro Ser Ser Cys Ile Met Asp Lys Asn Ala Ala Leu
205          370          375          380
206 Gln Asn Gly Ile Phe Cys Asn
207 385          390

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209 <210> SEQ ID NO: 4

211 <211> LENGTH: 384

213 <212> TYPE: PRT

C--> 215 <213> ORGANISM: Artificial

217 <220> FEATURE:

219 <223> OTHER INFORMATION: Description of artificial sequence: Chimeric Edg receptor

221 <400> SEQUENCE: 4

223 Met Gly Pro Thr Ser Val Pro Leu Val Lys Ala His Arg Ser Ser Val

224 1 5 10 15

225 Ser Asp Tyr Val Asn Tyr Asp Ile Ile Val Arg His Tyr Asn Tyr Thr

226 20 25 30

227 Gly Lys Leu Asn Ile Ser Ala Asp Lys Glu Asn Ser Ile Lys Leu Thr

228 35 40 45

229 Ser Val Val Phe Ile Leu Ile Cys Cys Phe Ile Ile Leu Glu Asn Ile

230 50 55 60

231 Phe Val Leu Leu Thr Ile Trp Lys Thr Lys Lys Phe His Arg Pro Met

232 65 70 75 80

233 Tyr Tyr Phe Ile Gly Asn Leu Ala Leu Ser Asp Leu Leu Ala Gly Val

234 85 90 95

235 Ala Tyr Thr Ala Asn Leu Leu Leu Ser Gly Ala Thr Thr Tyr Lys Leu

236 100 105 110

237 Thr Pro Ala Gln Trp Phe Leu Arg Glu Gly Ser Met Phe Val Ala Leu

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/904,099

DATE: 11/06/2001

TIME: 11:58:40

Input Set : A:\10602-013-999.txt

Output Set: N:\CRF3\11062001\I904099.raw

```

238          115          120          125
239 Ser Ala Ser Val Phe Ser Leu Leu Ala Ile Ala Ile Glu Arg Tyr Ile
240          130          135          140
241 Thr Met Leu Lys Met Lys Leu His Asn Gly Ser Asn Asn Phe Arg Leu
242 145          150          155          160
244 Phe Leu Leu Ile Ser Ala Cys Trp Val Ile Ser Leu Ile Leu Gly Gly
245          165          170          175
246 Leu Pro Ile Met Gly Trp Asn Cys Ile Ser Ala Leu Ser Ser Cys Ser
247          180          185          190
248 Thr Val Leu Pro Leu Tyr His Lys His Tyr Ile Leu Phe Cys Thr Thr
249          195          200          205
250 Val Phe Thr Leu Leu Leu Leu Ser Ile Val Ile Leu Tyr Cys Arg Ile
251          210          215          220
252 Tyr Ser Leu Val Arg Ser Ser Ser Arg Lys Val Ala Asn His Asn Asn
253 225          230          235          240
254 Ser Glu Arg Ser Met Ala Leu Leu Arg Thr Val Ile Ile Val Leu Ser
255          245          250          255
256 Val Phe Ile Ala Cys Trp Ala Pro Leu Phe Ile Leu Leu Leu Asp
257          260          265          270
258 Val Gly Cys Lys Val Lys Thr Cys Asp Ile Leu Phe Arg Ala Glu Tyr
259          275          280          285
261 Phe Leu Val Leu Ala Val Leu Asn Ser Gly Thr Asn Pro Ile Ile Tyr
262          290          295          300
263 Thr Leu Thr Ser Lys Glu Met Arg Arg Ala Phe Phe Arg Leu Val Cys
264 305          310          315          320
265 Asn Cys Leu Val Arg Gly Arg Gly Ala Arg Ala Ser Pro Ile Gln Pro
266          325          330          335
267 Ala Leu Asp Pro Ser Arg Ser Lys Ser Ser Ser Ser Asn Asn Ser Ser
268          340          345          350
269 His Ser Pro Lys Val Lys Glu Asp Leu Pro His Thr Asp Pro Ser Ser
270          355          360          365
271 Cys Ile Met Asp Lys Asn Ala Ala Leu Gln Asn Gly Ile Phe Cys Asn
272          370          375          380

```

274 <210> SEQ ID NO: 5

276 <211> LENGTH: 384

278 <212> TYPE: PRT

C--> 280 <213> ORGANISM: Artificial

282 <220> FEATURE:

284 <223> OTHER INFORMATION: Description of artificial sequence: Chimeric Edg receptor

286 <400> SEQUENCE: 5

288 Met Gly Pro Thr Ser Val Pro Leu Val Lys Ala His Arg Ser Ser Val

289 1 5 10 15

290 Ser Asp Tyr Val Asn Tyr Asp Ile Ile Val Arg His Tyr Asn Tyr Thr

291 20 25 30

292 Gly Lys Leu Asn Ile Ser Ala Asp Lys Glu Asn Ser Ile Lys Leu Thr

293 35 40 45

294 Ser Val Val Phe Ile Leu Ile Cys Cys Phe Ile Ile Leu Glu Asn Ile

295 50 55 60

296 Phe Val Leu Leu Thr Ile Trp Lys Thr Lys Lys Phe His Arg Pro Met

Use of n and / or Xaa has been detected in the Sequence Listing. Review the Sequence Listing to ensure a corresponding explanation is present in the <220> to <223> fields of each sequence using n or Xaa.

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/904,099

DATE: 11/06/2001

TIME: 11:58:41

Input Set : A:\10602-013-999.txt

Output Set: N:\CRF3\11062001\I904099.raw

L:148 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:3
L:215 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:4
L:280 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:5
L:345 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:6
L:362 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:7
L:379 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:8
L:395 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:9
L:411 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:10
L:428 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:11
L:445 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:12
L:462 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:13
L:479 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:14
L:497 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:15
L:515 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:16
L:532 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:17
L:549 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:18
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L:583 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:20
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L:651 M:220 C: Keyword misspelled or invalid format, <213> ORGANISM for SEQ ID#:24
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